UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,380	12/15/2003	Anand Joshi	60046.0061US01	4522

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HOPE BALDAUFF HARTMAN, LLC
P.O. BOX 2825
ATLANTA, GA 30301

EXAMINER
BROWN, MICHAEL J

ART UNIT	PAPER NUMBER
2116	

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/736,380	JOSHI ET AL.
	Examiner	**Art Unit**	
	Michael J. Brown	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 September 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-41</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-41</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>29 September 2006</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.   Claims 1-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Singer

et al.(US Patent 7,017,040).

As to claim 1, Singer discloses a method of updating a non-essential

region(signed data portion 54, see Fig. 2) stored in a memory device(flash memory 26,

see Fig. 1) in a computer system(system 10, see Fig. 1), the method comprising

building an image file(BIOS update file 50, see Fig. 2), the image file comprising an

essential region(unsigned data portion 56, see Fig. 2) for storing program code required

for booting the computer system and the non-essential region for storing optional

program code(signed data 60, see Fig. 2) for the computer system(see Item 102, Fig 3).

Singer also discloses the method comprising copying the image file to the memory

device in the computer system(see Item 114, Fig. 3), and following copying the image

file to the memory device in the computer system, updating only the non-essential

region in the memory device to update the optional program code for the computer

system(see column 4, lines 12-19).

As to claim 2, Singer discloses the method wherein the non-essential region in the image file comprises at least one non-essential block(see signed data portion 54 and signed data 60, Fig. 2).

As to claim 3, Singer discloses the method further comprising reserving at least one of a plurality of sectors(flash memory modules 28, see Fig. 1) in the memory device for storing the at least one non-essential block.

As to claim 4, Singer discloses the method wherein updating the non-essential region in the memory device comprises mapping the at least one non-essential block to the at least one reserved sector in the memory device(see column 2, lines 38-52).

As to claim 5, Singer discloses the method wherein updating the non-essential region in the memory device comprises mapping each non-essential block to a portion of the at least one reserved sector in the memory device(see column 2, lines 38-52).

As to claim 6, Singer discloses the method wherein the portion of the at least one reserved sector in the memory device is a paragraph multiple(see column 2, lines 38-52).

As to claim 7, Singer discloses the method wherein the program code in the essential region comprises a power-on self test (POST) routine(see column 2, lines 27-37).

As to claim 8, Singer discloses the method wherein the at least one non-essential block comprises a header(volume header 58, see Fig. 2) and at least one module(list of locations, see column 2, lines 40-41).

As to claim 9, Singer discloses the method wherein the header is located at the beginning of the at least one non-essential block(see Fig. 2).

As to claim 10, Singer discloses the method wherein the header comprises a pointer to a first module in the at least one non-essential block(see Fig. 2).

As to claim 11, Singer discloses the method wherein the at least one module comprises a module header(volume header 58, see Fig. 2) and module data(data 61, see Fig. 2).

As to claim 12, Singer discloses the method wherein the module header comprises a pointer to a next module in the at least one non-essential block(see Fig. 2).

As to claim 13, Singer discloses the method wherein the module data comprises at least one of graphics data, a language module, and diagnostic tools(see column 2, lines 45-47).

As to claim 14, Singer discloses a computer system(system 10, see Fig. 1) for updating non-essential data(signed data portion 54, see Fig. 2) in a memory device(flash memory 26, see Fig. 1), comprising the memory device for storing an image file(BIOS update file 50, see Fig. 2), the image file comprising an essential region(unsigned data portion 56, see Fig. 2) for storing program code required for booting the computer system and the non-essential region for storing optional program code(signed data 60, see Fig. 2) for the computer system(see Item 102, Fig 3). Singer also discloses the computer system comprising a memory(memory 14, see Fig. 1) for storing a program(BIOS installation process 25, see Fig. 1) containing code for updating the image file stored in the memory device, and a processor(processor 12, see Fig. 1),

functionally coupled to the memory and associated with the memory device, wherein the

processor is responsive to computer-executable instructions contained in the program

and operative to copy the image file to the memory device(see Item 114, Fig. 3), and

update only the non-essential region in the memory device to update the non-essential

data in the memory device after copying the image file(see column 4, lines 12-19).

As to claim 15, Singer discloses the computer system wherein the non-essential

region in the image file comprises at least one non-essential block(see signed data

portion 54 and signed data 60, Fig. 2).

As to claim 16, Singer discloses the computer system wherein the memory

device comprises a plurality of sectors(flash memory modules 28, see Fig. 1) for storing

the at least one non-essential block.

As to claim 17, Singer discloses the computer system wherein the at least one

non-essential block comprises a header(volume header 58, see Fig. 2) and at least one

module(list of locations, see column 2, lines 40-41).

As to claim 18, Singer discloses the computer system wherein the header is

located at the beginning of the non-essential block(see Fig. 2).

As to claim 19, Singer discloses the computer system wherein the at least one

module comprises a module header(volume header 58, see Fig. 2) and module

data(data 61, see Fig. 2).

As to claim 20, Singer discloses the computer system wherein the module data

comprises program code(see Fig. 2).

As to claim 21, Singer discloses the computer system wherein the module data

comprises at least one of graphics data, a language module, and diagnostic tools(see

column 2, lines 45-47).

As to claim 22, Singer discloses the computer system wherein the essential

region in the image file comprises critical program code(see column 2, lines 53-55).

As to claim 23, Singer discloses the computer system wherein the critical

program code comprises a power-on self test (POST) routine(see column 2, lines 27-

37).

As to claim 24, Singer discloses a computer-readable medium(system 10, see

Fig. 1) having computer-executable instructions for performing steps comprising

building an image file(BIOS update file 50, see Fig. 2), the image file comprising an

essential region(unsigned data portion 56, see Fig. 2) for storing program code required

for booting the computer system and a non-essential region(signed data portion 54, see

Fig. 2) for storing optional program code(signed data 60, see Fig. 2) for the computer

system(see Item 102, Fig 3). Singer also discloses the computer-readable medium

comprising instructions for copying the essential region and the non-essential region to

a memory device(flash memory 26, see Fig. 1) (see Item 114, Fig. 3), and following

copying the essential region and the non-essential region to the memory device,

updating only the non-essential region in the memory device(see column 4, lines 12-

19).

As to claim 25, Singer discloses the computer-readable medium wherein the non-essential region in the image file comprises at least one non-essential block(see signed data portion 54 and signed data 60, Fig. 2).

As to claim 26, Singer discloses the computer-readable medium further comprising reserving at least one of a plurality of sectors(flash memory modules 28, see Fig. 1) in the memory device for storing the at least non-essential block.

As to claim 27, Singer discloses the computer-readable medium wherein updating only the non-essential region in the memory device comprises mapping the at least one non- essential block to the at least one reserved sector in the memory device(see column 2, lines 38-52).

As to claim 28, Singer discloses the computer-readable medium wherein updating only the non-essential region in the memory device comprises mapping each non-essential block to a portion of the at least one reserved sector in the memory device(see column 2, lines 38-52).

As to claim 29, Singer discloses the computer-readable medium wherein the portion of the at least one reserved sector in the memory device is a paragraph multiple(see column 2, lines 38-52).

As to claim 30, Singer discloses the computer-readable medium wherein the program code in the essential region comprises a power-on self test (POST) routine(see column 2, lines 27-37).

As to claim 31, Singer discloses the computer-readable medium wherein the at

least one non-essential block comprises a header(volume header 52, see Fig. 2) and at

least one module(list of locations, see column 2, lines 40-41).

As to claim 32, Singer discloses the computer-readable medium wherein the

header is located at the beginning of the at least one non-essential block(see Fig. 2).

As to claim 33, Singer discloses the computer-readable medium wherein the

header comprises a pointer to a first module in the at least one non-essential block(see

Fig. 2).

As to claim 34, Singer discloses the computer-readable medium wherein the at

least one module comprises a module header(volume header 58, see Fig. 2) and

module data(data 61, see Fig. 2).

As to claim 35, Singer discloses the computer-readable medium wherein the

module header comprises a pointer to a next module in the at least one non-essential

block(see Fig. 2).

As to claim 36, Singer discloses the computer-readable medium wherein the

module data comprises program code(see Fig. 2).

As to claim 37, Singer discloses the computer-readable medium wherein the

module data comprises at least one of graphics data, a language module, and

diagnostic tools(see column 2, lines 45-47).

As to claim 38, Singer discloses a method of utilizing a non-essential

region(signed data portion 54, see Fig. 2) in a memory device(flash memory 26, see

Fig. 1) for executing updated program code, the method comprising searching the non-

essential region in the memory device for at least one module(BIOS update file 50, see

Fig. 2), wherein the memory device comprises a plurality of modules(unsigned data

portion 56, see Fig. 2) containing program code(signed data 60, see Fig. 2) for a

computer system(system 10, see Fig. 1) (see Item 102, Fig 3), and if the at least one

module is found in the non-essential region, then executing the program code in the at

least one module, wherein the at least one module in the non-essential region contains

an updated version of the program code for the computer system(see column 4, lines

12-19).

As to claim 39, Singer discloses the method further comprising if the at least one

module(list of locations, see column 2, lines 40-41) is not found in the non-essential

region, then searching an essential region in the memory device for the at least one

module, wherein the at least one module in the essential region contains a current

version(update command list 66, see Fig. 2) of the program code for the computer

system , and if the at least one module is found in the essential region, then executing

the program code in the at least one module(see column 2, line 38- column 3 line 11).

As to claim 40, Singer discloses the method wherein the at least one module

further comprises a module header(volume header 68, see Fig. 2), the module header

comprising an identification(signature 59, see Fig. 2) of the program code contained in

the at least one module.

As to claim 41, Singer discloses the method wherein the updated version of the

program code contained in the non-essential region comprises updated program code

for BIOS in the computer system(see column 3, lines 49-58).

Response to Arguments

2.   Applicant's arguments filed 9/29/2006 have been fully considered but they are

not persuasive. Applicant argues that Singer does not teach, suggest, or describe

"following copying the image file to the memory device, updating only the non-essential

region in the memory device to update the optional program code for the computer

system." Examiner disagrees as Singer discloses "selectively add, modify and/or

remove BIOS components(including signed data 60(optional program code)) from the

secure signed data(non-essential region) portion. Such adding, modifying and/or

removing is completed after the BIOS update file 50(image file) is copied to the flash

memory(memory device).

Applicant also argues that Singer does not teach "wherein the at least one non-

essential block comprises a header and at least one module." Examiner disagrees as

Singer discloses a volume header 58(header) and a list of locations(at least one

module).

Applicant also argues that Singer does not teach, suggest, or describe

"searching the non-essential region in the memory device for at least one module."

Examiner disagrees as Singer discloses the list of locations(at least one module) in

which is searched by the volume header in the signed data portion(non-essential

region).

Applicant finally argues that Singer does not teach, suggest, or describe "if the at

least one module is found in the non-essential region, then executing the program code

in the at least one module, wherein the at least module in the non-essential region

contains an updated version of the program code for the computer system." Examiner

disagrees as Singer discloses the list of locations(at least one module) in the signed

data portion(non-essential region) that contains updated code 62(updated version of the

program code) for the computer system.

Conclusion

3.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

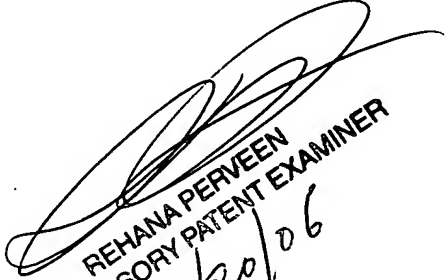policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Michael Brown whose telephone number is (571)272-

5932. The examiner can normally be reached on Monday-Thursday from 7:00am to

5:30pm(EST).

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIRS) system. Status information for the

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications are available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 886-217-9197 (toll-free).

Michael J. Brown
Art Unit 2116